

Waste Isolation Pilot Plant
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Attachment D		
Section	Change	Explanation of Change
D	Add Table D-1a to list of Tables	Table D-1a was added to the List of Tables.

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D-1	<p>The WIPP ... Disposal Phase. Tables D-1 <u>and D-1a</u> lists each item or system requiring inspection. ...</p> <p>Operational Procedures ... and time. The operational procedures are maintained at the WIPP facility. Tables D-1 <u>and D-1a</u> summarizes inspections, frequencies, responsible organizations, personnel making the inspection (by job title), and the types of anticipated problems as well as the references for the operational procedures. Inspection records are maintained at the WIPP site for three years by the responsible organization shown in Tables D-1 <u>and D-1a</u>.</p> <p>Waste Handling ... its use. Once a piece of equipment is identified to be operable, a preoperational inspection is initiated in accordance with the appropriate inspection procedure in Tables D-1, <u>D-1a, or in operational procedures</u>. ...</p> <p>Requirements of 20.4.1.500 NMAC (incorporating 40 CFR §264.15(d)), are met by the inspections for each item or system included in Tables D-1 <u>and D-1a</u>. The results of the inspections are maintained <u>in the operating record</u> for at least three years. ...</p> <p>Information regarding ... operating record. <u>CH transuranic (TRU) mixed waste equipment that is controlled by a logbook includes the waste handling fork lifts, all waste handling cranes, the adjustable center of gravity lift fixture, the CH TRU transuranic (TRU) underground transporter, the conveyance loading car, the trailer jockey, and the push-pull attachment. RH TRU mixed waste equipment that is controlled by a logbook includes the 140/25-Ton RH Bay Overhead Bridge Crane, Cask Transfer Cars, 25-Ton Cask Unloading Room Crane, Transfer Cell shuttle Car, RH Bay Cask Lifting Yolk, Facility Grapple, 6.25-ton Overhead Hoist, Facility Cask Rotating Device, Hot Cell Overhead Powered Manipulator, 15-Ton Hot Cell Crane, Facility Cask Transfer Car, 41-Ton Forklift, Facility Cask, and Horizontal Emplacement and Retrieval Equipment. Inspections of the Cask Unloading Room, Hot Cell, Transfer Cell, Facility Cask Loading Room, RH bay and radiation monitoring equipment will be recorded on data sheets.</u> In addition to the inspections listed in Tables D-1 <u>and D-1a</u>, many pieces of equipment are subject to regular preventive maintenance. These preventive maintenance activities along with the inspections in Tables D-1 <u>and D-1a</u> make mechanical failure of waste handling equipment unlikely. The WIPP Safety Analysis Report (DOE, <u>1999+1995a</u>) (<u>DOE/WIPP-95-2065 Rev. 4</u>) and the</p>	<p>These changes add Table D-1a to the text. Table D-1a is the Inspection Schedule for RH TRU mixed waste handling equipment.</p> <p>This section delineates the RH TRU mixed waste handling equipment which is controlled by a logbook and that inspections of certain areas is recorded on data sheets.</p> <p>This section includes references to Table D-1a and updates the Safety Analysis Report reference to include RH TRU mixed waste.</p>

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D-1a	Tables D-1, <u>D-1a</u> and D-2 of this Permit Attachment list the major categories of monitoring equipment, safety and emergency systems, security devices, and operating and structural equipment that are important to the prevention or detection of, or the response to, environmental or human health hazards caused by hazardous waste. These systems are inspected according to the frequency listed in Tables <u>D-1 and D-1a</u> , a copy of which is maintained at the WIPP facility. ... When in use, daily inspections are made of areas subject to spills, such as TRU <u>mixed</u> waste loading and unloading areas in the WHB Unit <u>and staging areas in the WHB and TME</u> , looking for deterioration in structures, mechanical items, floor coatings, equipment, malfunctions, etc., in accordance with 20.4.1.500 NMAC (incorporating 40 CFR §264.15(b)(4)).	This section references Table D-1a <u>for</u> RH TRU mixed waste and also indicates that inspections will occur in the staging areas
D-1a(1)	The inspections for the systems, equipment, structures, etc., listed in Tables <u>D-1 and D-1a</u> , include the types of problems (e.g., malfunctions, cracks in coatings or welds, and deterioration) to be looked for during the inspection of each item or system, if applicable, and are in compliance with 20.4.1.500 NMAC (incorporating 40 CFR §264.15(b)(3)).	The section references Table D-1a for RH TRU mixed waste.
D-1a(2)	Tables D-1, <u>D-1a</u> and D-2 of this Permit Attachment list the inspection frequencies and monitoring schedule for equipment and systems subject to the 20.4.1 NMAC hazardous waste management requirements. ... <u>When a RH TRU mixed waste container is present in the RH Complex, inspections are conducted visually and/or using a closed-circuit video camera in order to manage worker dose and to minimize occupational radiation exposures to as low as reasonably achievable (ALARA). More extensive inspections of these areas are performed at least annually during routine maintenance periods when RH-TRU mixed waste is not present.</u>	This section includes references to Table D-1a for RH TRU mixed waste and how inspections are performed in the RH Complex.

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D-1b(1)	Containers are ... WIPP facility. These containers are described in Permit Module III. Off-site CH TRU mixed waste will arrive in 55-gallon drums arranged as seven (7)-packs, <u>as 85-gallon drums as 4-packs, as 100-gallon drums as three-packs,</u> as Ten Drum Overpacks (TDOP), or as Standard Waste Boxes (SWB). ... If <u>CH TRU mixed</u> waste handling operations should stop for any reason with containers located on the TRUPACT-II Unloading Dock (TRUDOCK storage area <u>Staging Area</u> of the WHB Unit) in the Contact-Handled Packages , primary waste container inspections could not be accomplished until the containers of waste are removed from the shipping containers.	<p>This section is updated to include new drum configurations which may arrive at WIPP to include 85-gallon and 100-gallon drums.</p> <p>This section is also changed to reflect that the TRUDOCK area is now a staging and not a storage area.</p>
D-1b(1)	<u>RH TRU mixed waste will arrive in containers inside Nuclear Regulatory Commission (NRC)-certified casks designed to provide shielding and facilitate safe handling. Canisters, will be loaded singly into an RH-TRU 72-B cask. Drums will be loaded into a CNS 10-160B cask. The cask will be visually inspected upon arrival. Because RH TRU mixed waste is held in the Parking Area Staging Area or stored in the Parking Area Unit in sealed casks, there are no additional requirements for engineered secondary containment systems. Following removal of the canisters and drums, the interior of the cask will be inspected and surveyed for evidence of contamination that may have occurred during transport.</u>	This section describes how RH TRU mixed waste arrives at the facility, how it is held in the Parking Area Staging Unit and PAU and how these packages are inspected.

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D-1b(1)	<p><u>RH TRU mixed waste is handled and stored in the RH Complex of the WHB. The RH Complex includes the following: RH Bay, the Cask Unloading Room, the Hot Cell, the Transfer Cell, and the Facility Cask Loading Room. As RH TRU Mixed Waste is held in canisters within a canister rack the physical inspection of the drum or canister is not possible. Inspections of RH TRU mixed waste in these areas occurs remotely via closed-circuit camera a minimum of once weekly when stored waste is present. Because RH TRU mixed waste is stored in NRC-certified casks in both the RH Bay and Cask Unloading Room, inspections in these areas focus on the inventory and integrity of the casks. There are no additional requirements for engineered secondary containment systems. However, the floors in the RH Complex (including the RH Bay, Facility Cask Loading Rooms, and Cask Unloading Room) are coated concrete and during normal operations (i.e., when waste is present), the floor of the RH Complex is inspected visually or by using close-circuit cameras on a weekly basis to verify that it is in good condition and free of obvious cracks and gaps.</u></p> <p><u>Inspections of RH TRU mixed waste containers stored in the Hot Cell and Transfer Cell are conducted using remotely operated cameras. RH TRU mixed waste in the Hot Cell is stored in either drums or canisters. The containers in the Hot Cell are inspected to ensure that they are in acceptable condition. RH TRU mixed waste in the Transfer Cell is stored in the RH-TRU 72-B cask or shielded insert; therefore, inspections in this area focus on the integrity of the cask or shielded insert. RH TRU mixed waste in the Facility Cask Loading Room is stored in the facility cask; therefore, inspections in this area focus on the integrity of the facility cask.</u></p>	<p>This section describes how RH TRU mixed waste is held in the RH Complex and how inspections of casks, drums and canisters is accomplished..</p>
D-1b(1)	<p>Inspections will be conducted in the Parking Area Unit <u>and Parking Area Staging Area</u> at a frequency not less than once weekly <u>when waste is present</u>. These inspections are applicable to loaded, and stored Contact- or Remote-Handled Packages. ... Radiologically controlled areas can be established temporarily with barricades. ... Since <u>TRU mixed</u> waste to be <u>staged in the Parking Area Staging Area</u> or stored in the Parking Area Unit will be in sealed Contact- or Remote-Handled Packages, there will be no additional requirements for engineered secondary containment systems. Inspections of the Contact- or Remote-Handled Packages <u>staged in the Parking Area Staging Area</u> or stored in the Parking Area Unit shall be conducted at a frequency no less than once weekly and will focus on the inventory and integrity of the shipping containers and the spacing between trailers carrying the Contact- or Remote-Handled Packages.</p>	<p>This section describes how RH TRU mixed waste is held in the RH Complex and how inspections of casks, drums and canisters is accomplished.</p>

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D-1b(1)	Container inspections will be included as part of the surface TRU mixed waste handling areas (i.e. Parking Area Unit <u>and Staging Area</u> and WHB Unit <u>and Staging Area, and TMF Staging Area</u>) inspections described in Tables <u>D-1 and D-1a</u> . These inspections will also include the Derived Waste Storage Area of the WHB Unit <u>and RH Complex</u> . The Derived Waste Storage Area will consist of containers of 55 or 85-gallon drums or SWBs <u>for CH TRU mixed waste and 55-gallon drums for RH TRU mixed waste areas</u> . The total storage volume of this area is up to 66.3 cubic feet (1.88 cubic meters). A Satellite accumulation area (SAA) may be required in an area adjacent to the TRUDOCKS <u>for CH TRU mixed waste. A SAA may also be required in the RH bay and Hot Cell for RH TRU mixed waste.</u> This <u>These</u> SAAs will be set up on an as needed basis at or near the point of generation and the derived waste will be discarded into the active derived waste container.	<p>This section revises the text to include staging as well as storage areas.</p> <p>This section <u>also</u> revises the text to indicate that Derived <u>W</u>aste may be stored in a SWB for CH waste and 55-gallon drums for RH waste.</p> <p>This section also clarifies that a SAA may be required for RH TRU <u>mixed</u> waste.</p>
References	<p>DOE, 1997 <u>1999</u>. "WIPP Safety Analysis Report," DOE/WIPP-<u>95</u>-2065. Rev. <u>24</u>, U.S. Department of Energy. Washington, D.C., March 1997.</p> <p>DOE, 2000. WIPP Remote-Handled <u>Waste Preliminary Safety Analysis (RH PSAR)</u></p>	<p>This section <u>lists</u> the revised SAR reference.</p>
Table D1 Footnote b	Deterioration includes: <u>obvious</u> cracks, erosion, salt build-up, damage, corrosion, loose or missing parts, malfunctions, and structural deterioration.	<p>This footnote is revised to indicate that inspection of floors will look for obvious cracks.</p>
Table D1 Footnote e	These weekly inspections apply to container <u>staging and</u> storage areas when containers of waste are present for a week or more.	<p>This footnote is revised to indicate weekly inspections apply to both storage and staging areas.</p>
Table D1 Footnote k	Surface <u>CH</u> TRU mixed waste handling areas include the Parking Area Unit, the WHB unit, <u>Parking Area Staging Area, WHB Staging Area, TMF Staging Area, TRUDOCK Staging Area, Room 108 Airlock 107 Staging Areas</u> , and unloading areas.	<p>This footnote is revised to indicate weekly inspections apply to both storage and staging areas.</p>
Table <u>D-1a</u>	Added Table <u>D-1a</u>	<p>A new Table (D-1a) has been added to list inspection requirements for RH TRU Waste handling equipment.</p>